

ABSTRACT

METHOD OF MAKING MAGNETIC HEAD HAVING NARROW POLE TIP AND FINE PITCH COIL

Following the deposition of an insulation layer, a patterned P2 pole tip seed layer is deposited. Significantly, the pole tip seed layer is not deposited beneath the induction coil area of the magnetic head. A dielectric layer is next deposited and a patterned RIE etching mask that includes both a P2 pole tip trench opening and an induction coil trench opening is fabricated upon the dielectric layer. Thereafter, in a single RIE etching step, the P2 pole tip trench is etched through the dielectric material down to the seed layer, and the induction coil trench is etched through the dielectric material down to the insulation layer. The P2 pole tip is first electroplated up into its trench, an induction coil seed layer is next deposited, and the induction coil is then electroplated up into the induction coil trench.